

[illegible]

60

Determination of paraldehyde. 1. **Y. S. KAMICH.**
 Zapovednyy Lab. 8, 191-41 (USSR). A 100 ml. solution of
 only 0.02-0.25 g. paraldehyde and moderate amts. of
 HOAc is dissolved in 10 N H₂SO₄ (air-free), the soln. is
 brought to a temp. of 19-20°, and titrated with 0.3-0.5
 ml. portions of 0.5 N KMnO₄, while a stream of CO₂ is
 being passed over the surface of the soln. After the red-
 dish coloration has persisted for 3 min., 0.5 ml. excess
 KMnO₄ is added, then an excess of Mohr's salt is added,
 and the excess salt titrated with 0.5 N KMnO₄. The
 results are only approx. and may differ from actual values
 by 1-2% so that a second and more exact titration is
 included. If the sample contains paraldehyde, HOAc
 (not over 1 g.), AcH (not over 0.3 g.) vinylacetate and
 ethylidenediacetate, it is treated with Ag₂O, 60-70 cc. of
 the soln. is dild. to 200 ml. with 10 N H₂SO₄, and made
 up to 10 N with strong H₂SO₄. The temp. is brought to
 20° and the soln. is titrated with KMnO₄. If the sample
 contains more than 1 g. HOAc, more than 0.3 g. AcH,
 and also aldol, crotonaldehyde or formic acid, the soln.
 is treated with Ag₂O, dild. and titrated with KMnO₄.
 B. Z. Kamich

7

ASD-56A METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	
<p>CONTROLLING THE COMMERCIAL SYNTHESIS OF ACETIC ANHYDRIDE AND VINYL ACETATE FROM ACETYLENE. O. V. ZAVAROV. <i>Zavodskaya Lab.</i> 8, 571-6 (1949). Methods are described for the analysis of AcOH, Ac₂O, ethylene diacetate, vinyl acetate, AcH and paraldehyde in the synthesis of Ac₂O and vinyl acetate from acetylene. AcOH is detd. by titrating with 0.5 N NaOH at 23-25° with neutral red as indicator. In the case of vinyl acetate, the interference of AcH is eliminated by brominating the vinyl acetate at low temps. in the presence of a chlorine-iodine mixture. In detg. ethylene diacetate the soln. is heated (but not boiled) in a flask equipped with a reflux condenser, while it is saponified slowly with small amts. of alkali. The soln. is then boiled to drive off the AcH, excess alkali is added and the soln. titrated. The Ac₂O was detd. by the aniline method of Menshutkin and Vasil'ev but modified so that the aniline in a toluene soln. was added at temps. not above 0°, at which it does not react with the AcOH. AcH was detd. by the isometric bismulfite method of Ripper and paraldehyde</p> <p>by titration with permanganate in 10 N H₂SO₄. (C. A. 33, 9199). These methods were tested with synthetic mixts. The usual error for AcOH and ethylene diacetate was about 0.5-0.7%. For AcH in small amts. deviations at most were 0.1%. B. Z. K.</p>	
<p>ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>	

PROCESSING AND PREPARATION WORK

BC

U II'

Table of the relative amounts of acids, alcohols and other
 substances in the reaction. (A. V. Zin, by (Lecol. Lab., 1939, 6, 671)-
 674) - the reaction is exothermic. H_2O_2 , H_2O , CH_3COOH , $\text{CH}_3\text{COO}(\text{OAc})$,
 Me_2CO , H_2O , H_2O_2 can be analyzed by suitable adjustments
 of standard methods.

ASS-11 METALLURGICAL LITERATURE CLASSIFICATION

1939-1941

1939-1941	1942-1943	1944-1945	1946-1947	1948-1949	1950-1951	1952-1953	1954-1955	1956-1957	1958-1959	1960-1961	1962-1963	1964-1965	1966-1967	1968-1969	1970-1971	1972-1973	1974-1975	1976-1977	1978-1979	1980-1981	1982-1983	1984-1985	1986-1987	1988-1989	1990-1991	1992-1993	1994-1995	1996-1997	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011	2012-2013	2014-2015	2016-2017	2018-2019	2020-2021	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031	2032-2033	2034-2035	2036-2037	2038-2039	2040-2041	2042-2043	2044-2045	2046-2047	2048-2049	2050-2051	2052-2053	2054-2055	2056-2057	2058-2059	2060-2061	2062-2063	2064-2065	2066-2067	2068-2069	2070-2071	2072-2073	2074-2075	2076-2077	2078-2079	2080-2081	2082-2083	2084-2085	2086-2087	2088-2089	2090-2091	2092-2093	2094-2095	2096-2097	2098-2099	2100-2101	2102-2103	2104-2105	2106-2107	2108-2109	2110-2111	2112-2113	2114-2115	2116-2117	2118-2119	2120-2121	2122-2123	2124-2125	2126-2127	2128-2129	2130-2131	2132-2133	2134-2135	2136-2137	2138-2139	2140-2141	2142-2143	2144-2145	2146-2147	2148-2149	2150-2151	2152-2153	2154-2155	2156-2157	2158-2159	2160-2161	2162-2163	2164-2165	2166-2167	2168-2169	2170-2171	2172-2173	2174-2175	2176-2177	2178-2179	2180-2181	2182-2183	2184-2185	2186-2187	2188-2189	2190-2191	2192-2193	2194-2195	2196-2197	2198-2199	2200-2201	2202-2203	2204-2205	2206-2207	2208-2209	2210-2211	2212-2213	2214-2215	2216-2217	2218-2219	2220-2221	2222-2223	2224-2225	2226-2227	2228-2229	2230-2231	2232-2233	2234-2235	2236-2237	2238-2239	2240-2241	2242-2243	2244-2245	2246-2247	2248-2249	2250-2251	2252-2253	2254-2255	2256-2257	2258-2259	2260-2261	2262-2263	2264-2265	2266-2267	2268-2269	2270-2271	2272-2273	2274-2275	2276-2277	2278-2279	2280-2281	2282-2283	2284-2285	2286-2287	2288-2289	2290-2291	2292-2293	2294-2295	2296-2297	2298-2299	2300-2301	2302-2303	2304-2305	2306-2307	2308-2309	2310-2311	2312-2313	2314-2315	2316-2317	2318-2319	2320-2321	2322-2323	2324-2325	2326-2327	2328-2329	2330-2331	2332-2333	2334-2335	2336-2337	2338-2339	2340-2341	2342-2343	2344-2345	2346-2347	2348-2349	2350-2351	2352-2353	2354-2355	2356-2357	2358-2359	2360-2361	2362-2363	2364-2365	2366-2367	2368-2369	2370-2371	2372-2373	2374-2375	2376-2377	2378-2379	2380-2381	2382-2383	2384-2385	2386-2387	2388-2389	2390-2391	2392-2393	2394-2395	2396-2397	2398-2399	2400-2401	2402-2403	2404-2405	2406-2407	2408-2409	2410-2411	2412-2413	2414-2415	2416-2417	2418-2419	2420-2421	2422-2423	2424-2425	2426-2427	2428-2429	2430-2431	2432-2433	2434-2435	2436-2437	2438-2439	2440-2441	2442-2443	2444-2445	2446-2447	2448-2449	2450-2451	2452-2453	2454-2455	2456-2457	2458-2459	2460-2461	2462-2463	2464-2465	2466-2467	2468-2469	2470-2471	2472-2473	2474-2475	2476-2477	2478-2479	2480-2481	2482-2483	2484-2485	2486-2487	2488-2489	2490-2491	2492-2493	2494-2495	2496-2497	2498-2499	2500-2501	2502-2503	2504-2505	2506-2507	2508-2509	2510-2511	2512-2513	2514-2515	2516-2517	2518-2519	2520-2521	2522-2523	2524-2525	2526-2527	2528-2529	2530-2531	2532-2533	2534-2535	2536-2537	2538-2539	2540-2541	2542-2543	2544-2545	2546-2547	2548-2549	2550-2551	2552-2553	2554-2555	2556-2557	2558-2559	2560-2561	2562-2563	2564-2565	2566-2567	2568-2569	2570-2571	2572-2573	2574-2575	2576-2577	2578-2579	2580-2581	2582-2583	2584-2585	2586-2587	2588-2589	2590-2591	2592-2593	2594-2595	2596-2597	2598-2599	2600-2601	2602-2603	2604-2605	2606-2607	2608-2609	2610-2611	2612-2613	2614-2615	2616-2617	2618-2619	2620-2621	2622-2623	2624-2625	2626-2627	2628-2629	2630-2631	2632-2633	2634-2635	2636-2637	2638-2639	2640-2641	2642-2643	2644-2645	2646-2647	2648-2649	2650-2651	2652-2653	2654-2655	2656-2657	2658-2659	2660-2661	2662-2663	2664-2665	2666-2667	2668-2669	2670-2671	2672-2673	2674-2675	2676-2677	2678-2679	2680-2681	2682-2683	2684-2685	2686-2687	2688-2689	2690-2691	2692-2693	2694-2695	2696-2697	2698-2699	2700-2701	2702-2703	2704-2705	2706-2707	2708-2709	2710-2711	2712-2713	2714-2715	2716-2717	2718-2719	2720-2721	2722-2723	2724-2725	2726-2727	2728-2729	2730-2731	2732-2733	2734-2735	2736-2737	2738-2739	2740-2741	2742-2743	2744-2745	2746-2747	2748-2749	2750-2751	2752-2753	2754-2755	2756-2757	2758-2759	2760-2761	2762-2763	2764-2765	2766-2767	2768-2769	2770-2771	2772-2773	2774-2775	2776-2777	2778-2779	2780-2781	2782-2783	2784-2785	2786-2787	2788-2789	2790-2791	2792-2793	2794-2795	2796-2797	2798-2799	2800-2801	2802-2803	2804-2805	2806-2807	2808-2809	2810-2811	2812-2813	2814-2815	2816-2817	2818-2819	2820-2821	2822-2823	2824-2825	2826-2827	2828-2829	2830-2831	2832-2833	2834-2835	2836-2837	2838-2839	2840-2841	2842-2843	2844-2845	2846-2847	2848-2849	2850-2851	2852-2853	2854-2855	2856-2857	2858-2859	2860-2861	2862-2863	2864-2865	2866-2867	2868-2869	2870-2871	2872-2873	2874-2875	2876-2877	2878-2879	2880-2881	2882-2883	2884-2885	2886-2887	2888-2889	2890-2891	2892-2893	2894-2895	2896-2897	2898-2899	2900-2901	2902-2903	2904-2905	2906-2907	2908-2909	2910-2911	2912-2913	2914-2915	2916-2917	2918-2919	2920-2921	2922-2923	2924-2925	2926-2927	2928-2929	2930-2931	2932-2933	2934-2935	2936-2937	2938-2939	2940-2941	2942-2943	2944-2945	2946-2947	2948-2949	2950-2951	2952-2953	2954-2955	2956-2957	2958-2959	2960-2961	2962-2963	2964-2965	2966-2967	2968-2969	2970-2971	2972-2973	2974-2975	2976-2977	2978-2979	2980-2981	2982-2983	2984-2985	2986-2987	2988-2989	2990-2991	2992-2993	2994-2995	2996-2997	2998-2999	3000-3001	3002-3003	3004-3005	3006-3007	3008-3009	3010-3011	3012-3013	3014-3015	3016-3017	3018-3019	3020-3021	3022-3023	3024-3025	3026-3027	3028-3029	3030-3031	3032-3033	3034-3035	3036-3037	3038-3039	3040-3041	3042-3043	3044-3045	3046-3047	3048-3049	3050-3051	3052-3053	3054-3055	3056-3057	3058-3059	3060-3061	3062-3063	3064-3065	3066-3067	3068-3069	3070-3071	3072-3073	3074-3075	3076-3077	3078-3079	3080-3081	3082-3083	3084-3085	3086-3087	3088-3089	3090-3091	3092-3093	3094-3095	3096-3097	3098-3099	3100-3101	3102-3103	3104-3105	3106-3107	3108-3109	3110-3111	3112-3113	3114-3115	3116-3117	3118-3119	3120-3121	3122-3123	3124-3125	3126-3127	3128-3129	3130-3131	3132-3133	3134-3135	3136-3137	3138-3139	3140-3141	3142-3143	3144-3145	3146-3147	3148-3149	3150-3151	3152-3153	3154-3155	3156-3157	3158-3159	3160-3161	3162-3163	3164-3165	3166-3167	3168-3169	3170-3171	3172-3173	3174-3175	3176-3177	3178-3179	3180-3181	3182-3183	3184-3185	3186-3187	3188-3189	3190-3191	3192-3193	3194-3195	3196-3197	3198-3199	3200-3201	3202-3203	3204-3205	3206-3207	3208-3209	3210-3211	3212-3213	3214-3215	3216-3217	3218-3219	3220-3221	3222-3223	3224-3225	3226-3227	3228-3229	3230-3231	3232-3233	3234-3235	3236-3237	3238-3239	3240-3241	3242-3243	3244-3245	3246-3247	3248-3249	3250-3251	3252-3253	3254-3255	3256-3257	3258-3259	3260-3261	3262-3263	3264-3265	3266-3267	3268-3269	3270-3271	3272-3273	3274-3275	3276-3277	3278-3279	3280-3281	3282-3283	3284-3285	3286-3287	3288-3289	3290-3291	3292-3293	3294-3295	3296-3297	3298-3299	3300-3301	3302-3303	3304-3305	3306-3307	3308-3309	3310-3311	3312-3313	3314-3315	3316-3317	3318-3319	3320-3321	3322-3323	3324-3325	3326-3327	3328-3329	3330-3331	3332-3333	3334-3335	3336-3337	3338-3339	3340-3341	3342-3343	3344-3345	3346-3347	3348-3349	3350-3351	3352-3353	3354-3355	3356-3357	3358-3359	3360-3361	3362-3363	3364-3365	3366-3367	3368-3369	3370-3371	3372-3373	3374-3375	3376-3377	3378-3379	3380-3381	3382-3383	3384-3385	3386-3387	3388-3389	3390-3391	3392-3393	3394-3395	3396-3397	3398-3399	3400-3401	3402-3403	3404-3405	3406-3407	3408-3409	3410-3411	3412-3413	3414-3415	3416-3417	3418-3419	3420-3421	3422-3423	3424-3425	3426-3427	3428-3429	3430-3431	3432-3433	3434-3435	3436-3437	3438-3439	3440-3441	3442-3443	3444-3445	3446-3447	3448-3449	3450-3451	3452-3453	3454-3455	3456-3457	3458-3459	3460-3461	3462-3463	3464-3465	3466-3467	3468-3469	3470-3471	3472-3473	3474-3475	3476-3477	3478-3479	3480-3481	3482-3483	3484-3485	3486-3487	3488-3489	3490-3491	3492-3493	3494-3495	3496-3497	3498-3499	3500-3501	3502-3503	3504-3505	3506-3507	3508-3509	3510-3511	3512-3513	3514-3515	3516-3517	3518-3519	3520-3521	3522-3523	3524-3525	3526-3527	3528-3529	3530-3531	3532-3533	
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	--

The use of sodium rhodazotate for determining sulfur and sulfates in technical analysis. G. V. Zavarov. *Doklady Akad. Nauk SSSR* (1939); *Abstr. Russian Chem.*, 1940, No. 3, 56.—Na rhodazotate cannot be used as internal indicator, but it is suitable as an outside indicator under certain conditions. The inaccuracy of titration results is caused mainly by side reactions during the pptn. of SO_4^{--} . For large amts. of SO_4^{--} the presence of K and Na ions has a considerable effect on the accuracy of the detn. To overcome this error the soln. with the ppt. was boiled, to dissolve the sulfur pptd. simultaneously with BaSO_4 . A high acidity of the soln. (more than 1-3 drops of 0.1 N HCl per 70 cc. of the soln.) decreases the accuracy of the detn. The optimum concn. of the indicator is 0.0-0.02% of thiochromate. The indicator is added dropwise on an ashless filter paper. Z. developed methods for detg. up to 5% of BaSO_4 impurities in tech. H_2SO_4 for detg. 8-18 pyrite after fusing it with NaOH and for detg. 8-16 lime.

W. H. H. H.

Determination of melamine. G. V. Zavalov, *Khim. zhurn. Prom.* 1945, No. 3, 31. (Glad to sample of the unknown as fully as possible. Weigh approx. 0.1 g. and place in a small 30-ml. container. Add hot H_2O to the mark and heat on water-bath at 80° for approx. 30 min., stirring frequently. Repetish evaporated H_2O , allow to cool in the air to room temp. After 2 hrs. filter with suction through a glass filter No. 3 and wash 4 times with 4 ml. portions of water. The filtrate may also contain guanidine and dicyandiamide. Transfer the filtrate to a beaker marked at 200 and 400 ml. Add boiling H_2O to the 200 mark (and heat rapidly to 70°). Add 6 ml. of concd. $AcOH$, mix by gently swirling the beaker (do not use glass rod), and add picric acid soln. until picrate needles appear. Allow to stand for approx. 10 min. after which, without stirring, place the beaker in cold H_2O . After the beaker reaches room temp. add picric acid to the 400 mark and stir with a rod. After 1 hr., filter through a weighed glass filter No. 1 or 2, wash several times with a satd. soln. of melamine picrate, and dry to const. wt. at $105-110^\circ$. Percentage melamine = $[A + (0.00065)(4)/N \times 35.5]$, where A is the wt. of the ppt., N is the wt. of sample, 0.00065 is the soly. of melamine picrate in 100 ml. of liquid in which it is pptd., and 35.5 is the factor for converting picrate to per cent melamine. The accuracy of this method is 0.6%.

M. Hirsch

ASME METALLURGICAL LITERATURE CLASSIFICATION

ZAVAROV, G. V.

"Determination of Paraaminosalicylic Acid in the Control of the Production of Sodium Paraaminosalicylate," Zavodskaya Laboratoriya, No 8, 1952, pp 951-954.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010004-6

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964010004-6"

ZAVAROV, G. V.

AUTHOR: Zavarov, G. V.

32-2-11/60

TITLE: Methods for the Determination of the Additions of Sulfates in Soluble Phosphates (Metody opredeleniya primesi sul'fatov v rastvorimyykh fosfatakh)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 2, pp. 153-156 (USSR)

ABSTRACT: The methods of the determination of sulfates according to GOST (451-41, 201-41, OST 10178-39, 4172-48) are not exact and lead to errors as the results are very high with low acidity (0,05-0,1 n), while they are far to low with increased acidity (about 0,5n). It can also happen that in the investigations of technical phosphorus small amounts of bariumsulfate besides greater amounts of phosphates are not at all precipitated within a given time. There are two ways of determination, either the phosphate ion is removed, or the sulfate ion is precipitated as barium sulfate without preliminary separation. If the solution is very acidous in the second case the increased solubility of bariumsulfate must be compensated with a longer period of rest, i.e. it must be filtered the next day. This way also to 0,1% of SO₃

Card 1/2

Methods for the Determination of the Additions of Sulfates
in Soluble Phosphates

32-2-11/60

can be well determined as is seen from a table. In the first case the phosphate ion was precipitated as $\text{MgNH}_4\text{PO}_4 \cdot 6\text{H}_2\text{O}$ and the author found that precipitation should be carried out at boiling temperature with heavy stirring; a dissolution and precipitation increases the accuracy.

Three variants of analysis are mentioned, two of them for more precise determinations. In the latter mentioned the MgNH_4PO_4 deposit is dissolved and precipitated, boiled resp. and intensively stirred. The analysis can be essentially quickened by a combination with the titration method of sulfates according to Fritz and Frieland. A rather good coincidence is to be seen from a table of comparison of the results obtained according to gravimetric and volumetric methods. There are 4 tables,

ASSOCIATION: Chernorechensk Chemical Plant, imeni M. I. Kalnin
(Chernorechenskiy khimicheskly zavod im. M. I. Kalinina)

AVAILABLE: Library of Congress

Card 2/2

1. Barium sulfate-Determination
2. Sulfates-Determination
3. Titration

AUTHOR: Zavarov, G.V. 32-24-6-7/44

TITLE: A New Variant for Determining Active Chlorine in Chloride of Lime by the Method of Electrometric Titration (Novyy variant opredeleniya aktivnogo khlorina v khlornoy izvesti metodom elektrometricheskogo titrovaniya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 6, pp 681-682 (USSR)

ABSTRACT: In contrast to the method developed by Peno (Ref 1), which is usually employed, an electrometric titration method is described in this paper, in which a bimetallic system of polarized electrodes is used and the end of the reaction is observed at the moment of polarization by an excess amount of arsenite added to the solution. A particular feature of this variant is the application of a trivalent arsenic solution for titration, and further also the platinum wire anode and the tungsten wire cathode; plated platinum was found to give better results than smooth platinum. The analysis is described and a graph is given. At larger quantities of free lime disturb titration, the 1.0 n arsenite solution must contain 20 g/l sodium bicarbonate and must not show an alkaline reaction. In order to render the method

Card 1/2

A New Variant for Determining Active Chlorine in
Chloride of Lime by the Method of Electrometric
Titration

32-24-6-7/44

described as efficacious as possible, a suitable device must be constructed the schematical drawing of which is given; its essential feature is a cellophane diaphragm which warrants the dropwise addition of the solution, which is of special importance at the end of titration. In order to prevent corrosion of this device, it must either be suitably protected or it must be made from non-corrosive material. There are 2 figures, 1 table, and 3 Soviet references.

ASSOCIATION: Chernorechenskiy khimicheskiy zavod (Chernorech'ye Chemical Works)

1. Chlorine--Determination
2. Chlorinated lime--Analysis
3. Electrolytic titration--Performance
4. Electrolytic titration--Equipment

Card 2/2

ZAVAROV, G.V.

Trilon B as an inhibitor of the oxidation of sulfite solutions by atmospheric oxygen. Zav.lab. 26 no.12:1352-1353 '60.

(MIRA 13:12)

1. Chernorechenskiy khimicheskiy zavod imeni M.I.Kalinina.
(Sulfites) (Oxidation) (Acetic acid)

ZAVAROV, G.V.

Determination of sulfuryl chloride in the presence of
chlorosulfonic acid. Zav.lab. 27 no.6:670-672 '61. (MIRA 14:6)

1. Chernorechenskiy khimicheskiy zavod imeni M.I.Kalinina.
(Sulfuryl chloride) (Chlorosulfonic acid)

ZAVAROV, G.V.

Determination of free chlorine and sulfurous anhydride in
mixtures of sulfur chlorides and oxychlorides. Zav. lab.
30 no.1:25-27 '64. (MIRA 17:9)

1. Chernorechenskiy khimicheskii zavod.

ZAVAROV, G.V.

Determination of sulfuryl chloride in mixtures of sulfur
chlorides and oxychlorides. Zav. lab. 31 no.11:1316-1317
'65. (MIRA 19:1)

ZAVAROV, O., arkhitektor

Assembly line produces....houses. Znan.ta pratsia no.1:4-5
J1 '59. (MIRA 12:10)

1. Institut "Kiiiprojekt,"
(Buildings, Prefabricated)

GORLANOV, M.G., prepodavat.; POKAZAN'IEV, Aleksandr; ADAMOV, V.V., kand. ist. nauk, retsenzent; KULAGINA, G.A., kand. ist. nauk, retsenzent; BOROZDIN, Ye.A., red.; ZAVAROV, S.I., red.; POPOV, N.Ye., red.; BOGOZHNIKIN, V.N., red.; SILENSKIKH, T.N., red.; TARIKO, A.N., red.; KOLOSNITSYN, V., redaktor; MAKSIMOVA, E., tekhn. red.

[Revdin stories; from the history of the Revda Hardware Manufacturing and Metallurgical Plant] Revdinskie vyli; iz istorii Revdinskogo metiznometallurgicheskogo zavoda. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1960. 154 p. (MIRA 15:8)

1. Sekretar' Revdinskogo gorodskogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza (for Silenskikh).
(Revdin--Metallurgical plants)

ORLOV, S.I.; KOLMOGOROV, V.L.; ANTIPIN, S.V.; ZAVAROV, S.I.; SOLOV'YEV, B.P.;
VOROB'YEV, G.M.; KIRCHUNOV, A.I.

Introduction of sectional drawlates for the manufacture of low-
carbon wire-steel. Metallurg, 10 no.10:28-29 0 '65.
(MIRA 18:10)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov
i Revdinskiy metalizno-metallurgicheskii zavod.

L 01045-67 EWT(m)/EWP(f)/T IJP(c) WW/RM

ACC NR: AP6019541

(A)

SOURCE CODE: UR/0190/66/008/006/1028/1034

AUTHOR: Minsker, K. S.; Zavarova, T. B.; Bubis, L. D.; Fedoseyeva, G. T.; Burlakova, G. I.; Pakhomova, I. K. 58B

ORG: All-Union Scientific-Research Institute of Chloroorganic Products and Acrylates (Vsesoyuznyy nauchno-issledovatel'skiy institut khlororganicheskikh produktov i akri-latov) 15 15

TITLE: Assessment of the thermal stability of polyvinyl chloride and the efficiency of thermostabilizers

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 6, 1966, 1028-1034

TOPIC TAGS: polyvinyl chloride, solid mechanical property, chemical stabilizer, *THERMAL STABILITY*

ABSTRACT: A critical evaluation of the methods of assessment of the thermal- and thermal-oxidative stability of PVC is given and the efficiency of the thermostabilizing additives to PVC are discussed. The thermal stability of polyvinyl chlorides containing such stabilizers as $3\text{PbO} \cdot \text{PbSO}_4$, dibutyl lead maleinate, dibutyl lead laureate, calcium stearate, diphenylolpropane, bis-(2-methyl-4-oxy-5-tertiary-butylphenyl)-sulfide, bis-3-(methyl-4-oxy-5-tertiary-butylphenyl)methane, dibutyl-4,5-epoxyhexahydrophthalate, lead stearinate, and 2-oxy-4-methoxy benzophenone was examined by means of measuring HCl liberation during the heating of various stabilized PVC samples at 170°C

UDC: 678.01:54+678.743

Card 1/2

L 01045-67

ACC NR: AP6019541

for 0-300 minutes. It was found that for the evaluation of the thermal stability of the stabilized PVC, the commonly used indices such as "integral rate of HCl liberation for 180 min heating at standard conditions" and "thermostability" are inapplicable. The following indices are recommended as a basis for evaluating the thermal- and thermal-oxidative stability of the PVC stabilizers: (1) the time from the beginning of the decomposition reaction to the point at which the reaction rate becomes constant; (2) the rate constant of the dehydrochlorination reaction; and (3) the temperature dependence of the time of initiation of the PVC thermal decomposition at 170°C. Orig. art. has: 4 figures, 1 table.

SUB CODE: 07/ SUBM DATE: 31May65/ ORIG REF: 012/ OTH REF: 007

awm

Card 2/2

L 08435-67 EWT(m)/ENP(1)/ IJP(c) WH/TM
 ACC NR: AP6030857 (A,N) SOURCE CODE: UR/0191/66/000/009/0056/0059

AUTHOR: Minsker, K. S.; Zavarova, T. B.; Bubis, L. D.; Fedoseyeva, G. T.; Burlakova, G. I.; Pakhomova, Y. K.

ORG: none

TITLE: Evaluation of the thermal stability of polyvinyl chloride

SOURCE: Plasticheskiye massy, no. 9, 1966, 56-59

TOPIC TAGS: polyvinyl chloride, polymer stability, antioxidant additive, chemical stabilizer

ABSTRACT: A study of the thermal stability of polyvinyl chloride (PVC) containing various antioxidant stabilizers (HCl acceptors) showed that the rate of decomposition of PVC and the time θ required for a first-order dehydrochlorination reaction to be established can be used for characterizing PVC, and that θ can serve as a criterion for the effectiveness of stabilizer action. A correct and unambiguous estimate of the stabilizer additives introduced into PVC requires that the initial polymer be characterized by a value of θ close to zero. It was noted that an increase in the content of antioxidant stabilizers caused a change in the rate constant of the dehydrochlorination reaction. The effectiveness of the stabilizer action can in this case be determined from the change in the rate constant of HCl evolution. Another criterion of stabilizer action is τ , the duration of the induction period up to the start of

Card 1/2

UDC: 678.743.22.01:536.495

L-08135-67
ACC NR: AP6030857

liberation of HCl, also called thermal stability; τ is described by the Arrhenius equation $1/\tau = A \exp(E/RT)$. It was found that A and E characterize the chemical nature of PVC. The use of this equation for estimating PVC compositions should aid in obtaining a definite picture of the action of stabilizers introduced into PVC. Another equation which also applies to the PVC - stabilizer systems studied expresses the dependence of the thermal stability on the concentration of stabilizers introduced, $\tau = B \cdot C^{1/n}$, where C is the concentration of the stabilizer and B and n are constants for a given series of experiments. Orig. art. has: 6 figures and 2 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 011/ OTH REF: 006

Card 2/2

1s

ZAVAROVA, T.F.

Prevention of stular skin diseases in shoe industry workers. Vrach.
delo no.2:199 F '57. (MLRA 10:6)

1. Kafedra dermato-venerologii (zav. - prof. M.M.Kuznets) Kiyevskogo
instituta usovershenstvovaniya vrachev.
(SHOE INDUSTRY--HYGIENIC ASPECTS)
(SKIN--CARE AND HYGIENE)

ZAVAROVA*SHELUD'KO, T. F.

36979. Terapevticheskaya effektivnost' sovet'skogo preparata "Sovarsen" pri uplotnennom metode ego primeneniya. Uchen. zapiski (L'vovsk. nauch.-issled Koshno-venerol. In-t), t. II, 1949, o. 8-11

SO: Letopis' Zhurnal'nykh Statey, Vol 50, Moskva, 1949

ZAVAROVA, T.R., assistant

Use of tissue therapy in chronic complications of gonorrhea in
women. Ped., akush. i gin. 20 no.1:43-46 '58. (MIRA 13:1)

1. Kafedra dermato-venerologii (zav. - A.P. Lavrov) Kiyevakogo insti-
tuta usovershenstvovaniya vrachev (direktor - prof. I.I. Kal'chenko).
(GONORRHEA) (TISSUE EXTRACTS)

ZAVARSKAYA, I.P.; SORKINA, E.Z., doktor med. nauk

Result of a polupation examination for tuberculosis. Probl.
tub. no.8:12-16 '62. (MIRA 16:9)

1. Iz Tsentral'nogo instituta tuberkuleza (dir. - deystvitel'-
nyy cheln' AMN SSSR prof. N.A. Shmelev) Ministerstva zdрави-
okhraneniya SSSR, Moskva.
(TUBERCULOSIS)

MASSINO, S. V., prof; ZAVARSKAYA, I. P.; KORNBLIUM, O. I., kand. med. nauk; MITINSKAYA, L. A., kand. med. nauk; SOKOL'SKAYA, N. S., kand. med. nauk

Method for and evaluation of tuberculin tests in determining the infection of the population with tuberculosis. Probl. tub. 40 no.4:3-11 '62. (MIRA 15:6)

1. Iz otdela epidemiologii i organizatsii bor'by s tuberkulezom (zav. - prof. S. V. Massino) Tsentral'nogo instituta tuberkuleza Ministerstva zdavookhraneniya SSSR (dir. - deyatvitel'nyy chlen AMN prof. N. A. Smelev)

(TUBERCULIN—TESTING) (TUBERCULOSIS)

FANDEYEV, Boris Vasil'yevich; ZAVARSKIY, A.I., red.

[Cattle] Krupnyi rogatyi skot. Izd.3., perer. i dop.
Moskva, Sel'khozizdat, 1963. 294 p. (MIRA 17:2)

GERCHIKOV, N.P., prof.; ZAV-ROKIL, A.I., red.

[animal husbandry] Skotovodstvo. 1za.2., perer. 1 dcp.
Moskva, Kolos, 1964. 318 p. (MIRA 17:10)

VESELOV, Ye.A., prof.; VSYAKIKH, A.S., prof.; DENISOV, N.I., prof.;
GERCHIKOV, N.P., prof.; LASTOCHKIN, S.N., prof.; ALIKAYEV,
V.A., dots.; BESSARABOV, V.A., dots.; KALININ, V.I., dots.;
SOKOLOV, A.K., dots.; ZAVARSKIY, A.I., red.; DEYEVA, V.M.,
tekhn. red.

[Animal husbandry and veterinary hygiene] Zhivotnovodstvo i
zoogigiena. [By] E.A.Veselov i dr. Izd.2., perer. i dop.
Moskva, Sel'khozizdat, 1963. 451 p. (MIRA 17:2)

SHCHERBINA, Pavel Semenovich: Prinimal uchastiye YAKUSHA, I.V., inzh..
ZAVARSKIY, A.I., red.; MAKHOVA, M.N., tekhn.red.; GOR'KOVA, Z.D.,
tekhn.red.

[Bee culture] Pchelovodstvo, Izd. 4., perer. i dop. Moskva, Gos.
izd-vo sel'khoz.lit-ry, 1959, 663 p, (MIRA 13:6)
(Bee culture)

KHARLAMOV, M.K.; MAKSIMOV, A.A., otvetstvennyy redaktor; ZAVARSKIY, A.I.,
redaktor; BALLOD, A.I., tekhnicheskiy redaktor

["Lithuanian S.S.R." pavilion; a guidebook] Pavil'on "Litovskaya
SSR"; putevoditel'. Moskva, Gos.izd-vo selkhoz. lit-ry, 1956. 23 p.
(MIRA 9:8)

1. Moscow. Vsesoyuznaya sel'skokhozyaystvennaya vystavka, 1954-
2. Glavnyy metodist pavil'ona "Litovskaya SSR" (for Kharlamov)
(Lithuania--Agriculture) (Moscow--Agricultural exhibitions)

MARTYUGIN, Dmitriy Dmitriyevich, dots., kand. sel'khoz. nauk;
ZAVARSKIY, A.I., red.

[Practical manual in animal husbandry; handbook for
practical studies] Praktikum po skotovodstvu; posobie k
prakticheskim zaniatiyam. Izd.2., perer. i dop. Mo-
skva, Kolos, 1964. 174 p. (MIRA 17:11)

OSMOLOVSKIY, M.S.; GRIGOR'YEVA, A.Ya.; KUTSEVSKIY, N.S.; ZAVARSKIY, A.I.,
red.; HUDNIK, A.V., red.; GOR'KOVA, Z.D., tekhn.red.

[Loose housing of cattle] Besprizaznoe soderzhanie skota. Moskva,
Gos.izd-vo sel'khoz.lit-ry, 1960. 94 p. (MIRA 13:12)
(Dairy barns)

GOREGLYAD, Kh.S.; KORYAZHNOV, V.P.; SHLIPAKOV, Ya.P.; YEMEL'YANOVA, N.I.,
red.; ZAVARSKIY, A.I., red.; BESKHLIBNOV, Yu.A., red.; USTIMENKO,
L.F., red.; GOR'KOVA, Z.D., tekhn.red.

[Technology and veterinary inspection of animal products] Veteri-
narno-sanitarnaya ekspertiza s osnovami tekhnologii produktov
zhivotnovodstva. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 355 p.
(MIRA 13:12)

(Animal products)

(Meat inspection)

NUZHDIIN, Aleksandr Sergeyevich; ROZOV, Sergey Alekseyevich; ZAVARSKIY, A.I.,
red.; PROKOF'YEVA, L.N., tekhn. red.

[Principles of beekeeping] Osnovy pchelovodstva. Moskva, Gos. izd-
vo sel'khoz. lit-ry, zhurnalov i plakatov, 1961. 215 p.
(MIRA 14:10)

(Bee culture)

VAGIN, Ye.A., kand. sel'khoz. nauk; KVAPIL', A.I., kand. sel'khoz. nauk[deceased]; KLETSKIN, P.T., kand. sel'khoz. nauk; UTKIN, I.G., kand. biol. nauk. Prinimay uchastie KLADOVSHCHIKOV, V.F., kand. sel'khoz. nauk; ZAVARSKIY, A.I., red.

[Fur farming and rabbit husbandry] Pushnoe zverovodstvo i krolikovodstvo. Moskva, Kolos, 1965. 286 p.
(MIRA 18:7)

1. Nauchno-issledovatel'skiy institut pushnogo zverovodstva i krolikovodstva (for all except ZavarSKIY).

AVETISYAN, G.A., prof.; ZAVARSKIY, A.I., red.

[Bee culture] Pchelovodstvo. Moskva, Kolos, 1965. 287 p.
(MIRA 18:7)

OUR'YEV, V.I.; glavnyy metodist pavil'ona; NAPOL'SKIY, otvetstvennyy
redaktor; ZAVARSKIY, A.I., redaktor; VESKOVA, Ye.I., tekhnicheskiy
redaktor

[The "White Russia" pavilion; a guidebook] Pavil'on "Belorusskaia
SSR"; putevoditel', Moskva, Gos. izd-vo selkhoz. lit-ry, 1956.
25 p. (MLRA 9:9)

1. Moscow. Vsesoyuznaya sel'skokhozyaystvennaya vystavka, 1954-
(White Russia--Agriculture)
(Moscow--Agricultural exhibitions)

ZHIV...

BENEDIKTOV, I.A., redaktor; GRITSSENKO, A.V., redaktor; IL'IN, M.A., zamestiteľ glavnogo redaktora, LAPTEV, I.D., LISKUN, Ye.F.; LOBANOV, P.P., glavnyy redaktor; LYSENKO, T.D.; SKRYABIN, K.I.; STOLETOV, V.N.; PAVLOV, G.I., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SOKOLOV, N.S., professor, nauchnyy redaktor; ANTIPOV-KARATAYEV, I.N., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KARPINSKIY, N.P., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SHMSTAKOV, A.G., doktor sel'skokhozyaystvennykh nauk, professor, nauchnyy redaktor; RUBIN, B.A., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KOMARNITSKIY, N.A., dotsent, nauchnyy redaktor; LYSENKO, T.D., akademik, nauchnyy redaktor; POLYAKOV, I.M., professor, nauchnyy redaktor; SHCHEGOLEV, V.N., doktor sel'skokhozyaystvennykh nauk, professor, nauchnyy redaktor; YAKUSHKIN, I.V., akademik, nauchnyy redaktor; LARIN, I.V., professor, doktor biologicheskikh nauk, nauchnyy redaktor; SMELOV, S.P., professor, doktor biologicheskikh nauk, nauchnyy redaktor; EDL'SHTEYN, V.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SHCHERBACHEV, D.M., professor, doktor meditsinskikh nauk, nauchnyy redaktor; OGOLEVETS, G.S., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor; YAKOVLEV, P.N., akademik, nauchnyy redaktor; YEKIMOV, V.P., agronom, nauchnyy redaktor [deceased], KYTINGIN, G.P., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; TIMOFEEV, N.N., professor, nauchnyy redaktor; TUROV, S.I., professor, doktor biologicheskikh nauk; YUDIN, V.M., akademik, nauchnyy redaktor; LISKUN, Ye.F., akademik, nauchnyy redaktor; VITT, V.O., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; KALININ, V.I., kandidat sel'skokhozyaystvennykh nauk, nauchnyy redaktor:

(Continued on next card)

BENEDIKTOV, I.A.--- (continued) Card 2.

GREEN', L.K., akademik, nauchnyy redaktor; NIKOLAYEV, A.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; RED'KIN, A.P., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; SMETNEV, S.I., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POPOV, I.S., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; MANTYFEL', P.A., professor nauchnyy redaktor; INIKHOV, G.S., professor, doktor khimicheskikh nauk, nauchnyy redaktor; ANFIMOV, A.N., professor, nauchnyy redaktor; GUBIN, A.F., professor, doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; POITEV, V.I., professor, doktor veterinarnykh nauk, nauchnyy redaktor; LINDE, V.V., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; CHERGAS, B.I., professor, doktor biologicheskikh nauk, nauchnyy redaktor; NIKOL'SKIY, G.V., professor, nauchnyy redaktor; AVTOKRATOV, D.M., professor, doktor veterinarnykh nauk, nauchnyy redaktor; IVANOV, S.V., professor, doktor biologicheskikh nauk, nauchnyy redaktor; VIKTOROV, K.P., professor, doktor veterinarnykh nauk, nauchnyy redaktor; KOLYAKOV, Ya.Ye., professor, doktor veterinarnykh nauk, nauchnyy redaktor; ANTIPIN, D.N., professor, doktor veterinarnykh nauk, nauchnyy redaktor; MARKOV, A.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; DOMRACHEV, G.V., professor, doktor veterinarnykh nauk, nauchnyy redaktor; OLIVKOV, B.M., professor, doktor veterinarnykh nauk, nauchnyy redaktor [deceased]; FLEGMATOV, N.A., professor, doktor veterinarnykh nauk, nauchnyy redaktor; BOLTINSKIY, V.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; VIL'YAMS, Vl.P., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; KRASNOV, V.S., kandidat tekhnicheskikh nauk, nauchnyy redaktor;

(Continued on next card)

BENEDIKTOV, I.A.---(continued) Card 3.

YEVREINOV, M.G., akademik, nauchnyy redaktor; SAZONOV, N.A., doktor tekhnicheskikh nauk, nauchnyy redaktor; NIKANDROV, B.I., inzhener, nauchnyy redaktor; KOSTYAKOV, A.N., akademik, nauchnyy redaktor; CHERKASOV, A.A., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; DAVITAYA, F.F., doktor sel'skokhozyaystvennykh nauk, nauchnyy redaktor; IVANOV, N.N., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; ORLOV, P.M., professor, doktor tekhnicheskikh nauk, nauchnyy redaktor; LOZA, G.M., kandidat ekonomicheskikh nauk, nauchnyy redaktor; CHERNOV, A.V., kontrol'nyy redaktor; ZAVARSKIY, A.I., redaktor; ROS-SOSHANSKAYA, V.A., redaktor; FILATOVA, N.I., redaktor; YEMEL'YANOVA, N.I., redaktor; SILIN, V.S., redaktor BRANZBURG, A.Yu., redaktor; MAGNITSKIY, A.V., redaktor terminov; KUDRYAVTSOVA, A.G., redaktor terminov; AKSENOVA, A.P., mladshiy redaktor; MALYAVSKAYA, O.A., mladshiy redaktor; FEDOTOVA, A.F., tekhnicheskii redaktor

(Continued on next card)

BENEDIKTOV, I.A.---(continued) Card 4.

[Agricultural encyclopedia] Sel'skokhoziaistvennaia entsiklopediia.
Izd. 3-e, perer. Moskva, Gos. izd-vo selkhoz. lit-ry. Vol. 5. [T-IA.]
1956. 663 p. (MLRA 9:9)
(Agriculture--Dictionaries and encyclopedias)

VOROB'YEV, P.A.; SHTYKOVA, Ye.I.; KOVNEREV, I.P.; VASIL'YEV,
N.A., retsenzent; ZAVARSKIY, A.I., red.

[Breeding Romanov sheep] Razvedenie romanovakikh ovets.
Moskva, Kolos, 1965. 191 p. (MIRA 18:12)

1. Glavnoye upravleniye zhivotnovodstva Ministerstva
sel'skogo khozyaystva SSSR (for Vasil'yev).

ZAVARSKIY, Emmanuil Viktorovich, prepodavatel'; BABIN, Yevgeniy Nikolayevich, prepodavatel'; KISELEVA, N.P., red.

[Elimination of faults in TE3 diesel locomotives] Ustranenie neispravnostei teplovoza TE3. Izd.2., ispr. 1 dop. Moskva, Transport, 1964. 123 p. (MIRA 18:1)

1. Orenburgskiy tekhnikum zheleznodorozhnogo transporta (for ZavarSKIY, Babin).

ANKHAROV, Aleksey Mikhaylovich; MIRONOV, Georgiy Georgiyevich; ZAVARTSEV,
A.M., inzh., retsenzent; BERZIN, B.O., kand.tekhn.nauk, red.;
TAIROVA, A.L., red, izd-va; BL'KIND, V.D., tekhn.red.

[Automatic recording of the performance of machines] Avtomaticheskii
uchet raboty mashin. Moskva, Gos. nauchno-tekhn.izd-vo mashino-
stroit. lit-ry, 1957. 113 p. (MIRA 11:3)
(Machine-shop practice) (Recording instruments)

ZAVARTSEV, A.M.

AUTHOR: Zavartsev, A.M. 113-58-3-15/16
TITLE: Autotractor Devices (Avtotraktornyye pribory)
PERIODICAL: Avtomobil'naya Promyshlennost', 1958, Nr 3, p 45 (USSR)
ABSTRACT: The article contains a review of the book by V.A. Popov:
"Autotractor Devices" (Avtotraktornyye pribory), published
by Mashgiz, 1956.
ASSOCIATION: NIIAvtopriborov
AVAILABLE: Library of Congress
Card 1/1 1. Cargo vehicles-U.S.S.R.

ACC NR: AP7001703

SOURCE CODE: UK/0032/66/032/012/1523/1525

AUTHOR: Kogan, M. G.; Andreychenko, I. T.; Bogin, V. S.; Zavartsev, N. A.;
Karker, Ya. I.

ORG: none

TITLE: Laboratory high-temperature furnace for heating and melting of metals

SOURCE: Zavodskaya laboratoriya, v. 32, no. 12, 1966, 1523-1525

TOPIC TAGS: metalluric research, metallurgic furnace, high temperature furnace,
electron beam furnace

ABSTRACT: A laboratory vacuum furnace for heating, melting, zone refining, and evaporating (for vacuum-vapor deposition) primarily refractory metals has been designed and built at an unidentified institution. The furnace operates with several heating systems (resistance, radiation, arc, and electron beam) used individually or in combination. The vacuum chamber can be evacuated to a pressure of 10^{-6} mm Hg. The furnace produces ingots 50 mm in diameter and up to 400 mm long. The charge can be placed in advance or fed during the melting. Zone refining can be done with a metal bar in the horizontal or vertical position. In vacuum-vapor deposition, the evaporation is done with an electron beam, and the temperature of the substrate is controlled with radiant heat. The furnace has two 45-kw electron guns operating with an accelerating voltage of 30 kv. Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: none/ ATD PRESS: 5111

Card 1/1

UDC: 621.365:621.52:546.3

L 29425-66 ENT(m)/BPC(1), ETI IUP(C) JD/JG

ACC NR: AP6017978 (H) SOURCE CODE: UR/0413/66/000/010/0080/0080

INVENTOR: Kogan, M. G.; Andreychenko, I. T.; Karker, Ya. I.; Bogin, V. S.;
Zavartsev, N. A. 64/13

ORG: none

TITLE: A method of vacuum melting highly reactive refractory metals. Class 40,
No. 181813 27

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 10, 1966, 80

TOPIC TAGS: metal, reactive metal, refractory metal, metal melting, vacuum melting,
induction melting 8

ABSTRACT: This Author Certificate introduces a method of vacuum scull melting of
highly reactive refractory metals. To obtain uniformly superheated metal within
the scull, the initial metal or alloy is melted in an electromagnetic field with
the heat produced by axial or eddy currents. [MS]

SUB CODE: 11/ SUBM DATE: 06Jun63/ ATD PRESS: 5010
13/

Card 1/1 fv

UDC: 621.745.5

ZAVARTSEVA, M.N., assistant

Physical development of children in the creches of Voronezh.
Vop. okh. mat. i det. 7 no.1:75-77 Ja '62. (MIRA 15:3)

1. Iz kafedry propedeytiki detskikh bolezney (sav. -- kand.
med.nauk L.N. Titova) Voronezhskogo meditsinskogo instituta.
(INFANTS--GROWTH)
(VORONEZH--DAY NURSERIES)

ACCESSION NR: AR4039222

S/0285/64/000/004/0018/0019

SOURCE: Ref. zh. Turbostroyeniye. Otd. vy*p., Abs. 4.49.97

AUTHOR: Zavartseva, N. A.

TITLE: Strength calculations of radial turbomachine webs

CITED SOURCE: Tr. Tsentr. n.-i. avtomob. i avtomotorn. in-ta, vy*p. 55, 1963, 34-79

TOPIC TAGS: turbomachinery, turbine, turbine rotor, turbine web, turbine rotor strength, turbine blading strength, turbine blading, turbine bucket

TRANSLATION: A method for calculating webs with center holes which are integral from centrifugal forces and temperature field along the radius under variable elasticity parameters is given. Webs which do not have a perpendicular plane of symmetry axis are examined. The web is considered as a slightly bent plate with radially arranged fin blades. The blades are considered as rods and the inertia load from the blading is taken as axially symmetrical. The temperature distribution along the periphery is assumed to be uniform. The hypotheses of the theory of plates and shells are used. An axially symmetrical problem with independent

Card 1/2

ACCESSION NR: AR4039222

variable radius is derived on the basis of these assumptions. The computational sequence is based on an equation of equilibrium, conditions of compatibility and relation of stress to strain. The tensile stresses and flexures are determined in radial and cylindrical cross sections with consideration to the joint working of the web with the blading. A system of four differential equations is set up for determining the intensity of the forces and bending moments in the radial and cylindrical cross sections. For a numerical solution, this system is converted into a system of four integral equations which can be solved by the successive approximation method. The effect of the blade rigidity and changes brought about by flexure in the general stressed state of the web are shown by numerical examples.

DATE ACQ: 07May64

SUB CODE: AS, PR

ENCL: 00

Card 2/2

ACCESSION NR: AT4010245

S/3052/63/000/003/0169/0180

AUTHOR: Zavartseva, P. A. (Moscow)

TITLE: Thermal stresses in disks of radial gas turbines

SOURCE: AN UkrSSR. Institut mekhaniki. Teplovy*ye napryazheniya v elementakh konstruktsiy; nauchnoye soveshchaniye. Doklady*, no. 3, 1963, 169-180

TOPIC TAGS: turbine, gas turbine, thermal stress, metal fatigue, turbine blade thermal stress

ABSTRACT: High peripheral velocity and unequal heating lead to high stresses in disks and blades of radial gas turbines. Therefore, attention should be paid during design to thermal stresses, which are redistributed due to creep of the disk during operation. In the investigation, the author considers that the temperature, and consequently the plastic features of the material, change only along the depth and radius of the disk. Formulas are evolved from the basic hypotheses for plates and shells. Stress, moment and deflection equations are evolved for different kinds of disks and blades. Analysis shows that for existing types of uniformly heated disks, the maximum bending stress is about 70-90% of the maximum tensile

Card 1/2

ACCESSION NR: AT4010245

stress. However, the stress drops sharply further away from the center, showing that the bending is only local. Orig. art. has: 3 figures and 26 formulas.

ASSOCIATION: Institut mekhaniki AN UkrSSR (Mechanics Institute AN SSSR)

SUBMITTED: 00

DATE ACQ: 17Jan64

ENCL: 00

SUB CODE: AP, PR

NO REF SOV: 004

OTHER: 000

Card 2/2

ZAVAR-TSEVA, V. M.

P.3

25(2,5)

PHASE I BOOK EXPLOITATION

SOV/2885

Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya

Povysheniye prochnosti elementov konstruktsiy i detaley mashin
(Increasing the Strength of Constructional and Machine Elements)
Moscow, Mashgiz, 1959. 210 p. (Series: Its: Sbornik kn. 91)
5,500 copies printed.

Ed. (Title page): I. V. Kudryavtsev, Doctor of Technical Sciences, Professor; Ed. (Inside book): A. G. Nikitin, Engineer; Tech. Ed.: V. D. El'kind; Managing Ed. for Literature on Transport Machine Building (Mashgiz): K. A. Ponomarev, Engineer.

PURPOSE: This collection of articles is intended for designers, process engineers, and scientific research workers in the machine-building industry.

COVERAGE: The collection contains papers dealing with experimental work done recently by TsNIITMASH. The experiments are concerned with the practical use of surface work hardening in industry. Industrial practices intended to increase the strength and

Card 1/10

Increasing the Strength (Cont.)

SOV/2885

service life of machine parts and constructional elements are discussed. Several articles are devoted to problems of increasing the fatigue strength of machine parts by work hardening. Industrial practices of NKMZ in Kramatorsk in external burnishing of large machine parts are presented. Tools and fixtures used in surface work hardening are described. No personalities are mentioned. References follow each article.

TABLE OF CONTENTS:

Preface

3

I. STRESS DISTRIBUTION

Kudryavtsev, I. V. On the Effect of Residual Stresses on the Fatigue Strength of Steel

5

This article is a report on an international conference on fatigue strength held in London in September 1956. The effects of residual stresses on fatigue stress with and without stress concentrations, the effect of residual stresses after welding, and the effect of residual stresses.

Card 2/10

Increasing the Strength (Cont.)

SOV/2885

after long-time storage are discussed. The significance of residual stresses in increasing the fatigue strength of shafts by surface work hardening is pointed out.

Zavartseva, V. M. /Candidate of Technical Sciences/. Application of the Photoelastic Method of Stress Analysis in the Contact Zone of a Bent Beam With Bearing Clamps 23

Fringe photographs are shown of stress-concentration factors and lines of principal stresses in a cantilever shaft of rectangular cross-section with fitted bearing clamps made of IM-44 (phenolformaldehyde plastic). The stress distribution over contact areas between shaft and clamps is discussed. Conclusions are drawn on the basis of an analysis of the results of an investigation.

Zavartseva, V. M. Photoelastic Determination of Stresses in a Disk With a Keyway Under Uniform Internal Pressure 39

Stresses were determined for disks with one keyway, with

Card 3/10

Increasing the Strength (Cont.)

SOV/2885

two keyways, and without a keyway. Fringe photographs and lines of principal stresses are presented and analyzed.

Zaytsev, G. Z. Engineer Residual Stresses in Materials and Welded Joints of 1Kh18N12T Steel Tubes

56

The effect of heat-treatment methods on the amount of residual stresses in tube walls and welded joints is discussed. A technique of measuring residual stresses is described.

II. SURFACE WORK HARDENING OF MACHINE ELEMENTS

Kulikov, O.O. Candidate of Technical Sciences. Some Concepts Necessary for Studying the Fatigue Strength of Surface Work-hardened Machine Elements

64

The author attempts to systematize basic concepts and establish terminology in the field of fatigue strength. The phenomena accompanying endurance tests and the behavior of machine parts under cyclic loading are described. Characteristic
Card 4/10

Increasing the Strength (Cont.)

SOV/2885

features of these phenomena and factors causing them are discussed

Khayet, G. L. /Candidate of Technical Sciences/, D. A. Sten'ko, and B. A. Brusilovskiy, /Engineers/. Practice at the Novo-Kramatorskiy mashinostroitel'nyy zavod (Kramatorsk New Machine-building Plant) in External Burnishing of Large Machine Parts With Rollers

76

The technique of conducting experiments, the geometry of the tool, the principles of selecting the burnishing regime, and the devices used are described and discussed. A table with diagrams of burnished machine parts and data on effects of burnishing is presented.

Kulikov, O.O. Effect of Work Hardening by Burnishing With Rollers and Some Loading Conditions on the Endurance Limit of Sections of Shafts With Press-fitted Machine Parts

95

The difference in behavior under cyclic loads between plain shafts and shafts with press-fitted machine parts is pointed out

Card 5/10

Increasing the Strength (Cont.)

SOV/2885

out. The effect of loading on the bore and shaft and the of the duration of the test (20 and 100 million cycles) were investigated. The preparation and burnishing of samples and the technique of testing are described. Results of the investigation are discussed.

Kudryavtsev, I. V., and N. A. Balabanov [Candidate of Technical Sciences]. Work Hardening of Stepped Shafts by Fillet Peening 133

Results of fatigue tests on stepped steel shafts are analyzed. Comparisons are drawn between shafts work-hardened by fillet peening and shafts not subjected to any work-hardening process. Fillet peening was accomplished on a milling machine with a special attachment having a spring-actuated striking pin with a spherically rounded end.

Barats, A. I. [Engineer]. Increasing the Life of Metallurgical-machinery Parts by External Burnishing With Rollers 123

Constructions of the burnishing devices used are described, and some problems connected with the technique
Card 6/10

Increasing the Strength (Cont.)

SOV/2885

of burnishing are discussed. Results of testing burnished surfaces in operation are presented.

Kudryavtsev, I. V., T. V. Naumova, and L. M. Rosenman
/Engineers/. Effect of Work Hardening on the Strength of
Carbon Steels

129

Changes in hardness, ductility, yield, ultimate stress, impact toughness, and fatigue limit of carbon steels due to work hardening are investigated. Results are presented in tables and diagrams.

Zaytsev, G. Z. Fatigue Strength of Teeth of Large-module
Gears

142

Fatigue tests on large cast and forged gears are described. The effect of surface work hardening on spaces between teeth is investigated.

III. PROPERTIES OF STEELS AT NORMAL AND HIGH TEMPERATURES

Card 7/10

Increasing the Strength (Cont.)

SOV/2885

Kudryavtsov I. V., and T. V. Naumova. *Effect of Large Plastic Deformations on the Strength Properties of Austenitic Steels* 159

The investigation described in this article was conducted in order to establish the effect of extensive strain hardening on the fatigue resistance of heat-resistant steels. In addition to fatigue tests, short-time tensile, compression, impact, and hardness tests were taken. The tests were taken at room temperature (20°C) and at elevated temperatures (580°C). The effect of heat treatment on strain-hardened steels and the simultaneous effect of strain hardening and artificial aging were investigated.

Aleksandrov, B. I. *[Candidate of Technical Sciences]*. *Fatigue Resistance of EI723 Pearlitic Steel at High Temperatures* 174

The method of investigation and preparation of samples are described. The influence of temperature and external burnishing with rollers, the sensitivity to stress concentration, and the changes in microstructure due to cyclic
Card 8/10

Increasing the Strength (Cont.)

SOV/2885

loading are examined.

Gulyayev, A. P. /Doctor of Technical Sciences, Professor/, and M. F. Vorokhanova, /Engineer/. Microscopic Investigation of Plastic Deformation

188

This article describes an experimental investigation of plastic deformation with the use of the optical microscope. A titanium model of the microsection was then studied in an electron microscope. Plastic flow, changes in grain shape, and generation of cracks are discussed.

IV. MODERN STRENGTH-TESTING EQUIPMENT

Yatskevich, S. I. /Candidate of Technical Sciences/, and N. Ye. Naumchenkov /Engineer/. Model U-200 Machine for Fatigue Testing Shafts With up to 200-Millimeter Diameters

201

This machine, designed and built by TsNIITMASH, requires only 16 kw. for fatigue testing 200-millimeter shafts. It employs the principle of resonance for loading. Other
Card 9/10

Increasing the Strength (Cont.)

SOV/2885

loading are examined.

Gulyayev, A. P. /Doctor of Technical Sciences, Professor/,
and M. F. Vorokhanova, /Engineer/, Microscopic Investigation
of Plastic Deformation 188

This article describes an experimental investigation of plastic deformation with the use of the optical microscope. A titanium model of the microsection was then studied in an electron microscope. Plastic flow, changes in grain shape, and generation of cracks are discussed.

IV. MODERN STRENGTH-TESTING EQUIPMENT

Yatskevich, S. I. /Candidate of Technical Sciences/, and
N. Ye. Naumchenkov /Engineer/, Model U-200 Machine for
Fatigue Testing Shafts With up to 200-Millimeter Diameters 201

This machine, designed and built by TsNIITMASH, requires only 16 kw. for fatigue testing 200-millimeter shafts. It employs the principle of resonance for loading. Other
Card 9/10

Increasing the Strength (Cont.)

SOV/2885

design considerations and operating techniques are discussed.

AVAILABLE: Library of Congress

Card 10/10

GO/ec
1-26-60

SAVATSEVA, V. M. and SEVSTOV, M. M. (Zand. Tech Sci)

"Application of the Optical Method for Analyzing the Distribution of Residual Stresses in the Process of Surface Strengthening of Machine Parts," pp 60-93, of the Book "Studies on the Strength of Steel," Mashgiz, 1951.

Translation W-23621, 21 Aug 1952.

ZAVARTSEVA, V. M.

ZAVARTSEVA, V. M. --"Investigation of Contact Stresses in Sinking Without Expansion." Sub 26 May 52, Central Sci Res Inst of Technology and Machine Building (TsNITMash) (Dissertation for the Degree of Candidate in the Technical Science)

SO: VECHERNAYA MOSKVA, JANUARY-DECEMBER 1952

ZAVARTSEVA, V.M., kandidat tekhnicheskikh nauk.

Use of polarization and optical methods for the study of contact stresses
in upsetting without preliminary widening. [Trudy] TSNITMASH no.63:130-
188 '54. (MKLA 7:9)

(Strains and stresses) (Photoelasticity)

Card 1/1 pub. 126 - 12/35

Authors : Melny, Ye. P., Dr. Tech. Sc. and Zuvartseva, V. M., Cand. Tech. Sc.

SAVERIN, M. M. ; ¹³ZAVARZEVA, V. M.

Use of an optical method for analysing the distribution of the residual stresses in surface-worked parts. (Solution of the problem of experimental investigation of the residual stresses in the surface layer, i.e., the zone where stress concentrations occur, by simulating in an optically active material stress conditions which are analogous to those occurring in a treated part. Considerable concentrations of residual compression stresses were observed in the zone of the cracks, which relieve considerably stress concentrations there due to external load) - pp. 90 - 93.

A paper contained in the symposium "Research Work on the Strength of Steel", edited by I. V. Kudryatseva, Mashgiz, 1951.

MAVERIN, M. M. ; ZAVAROVA, T. L.

Application of an optical method of stress determination for solution of problems of "elastic-plastic" contacts. (Investigation of the distribution of the specific pressure along the contact zone during rolling; the rolls were made of an optically active material, the rolled strip was of lead. Optical analysis of the experimental results proved the hypothesis of the existence of a zone of adherence (adhesive zone) on the contact surface.) - pp. 196 - 222

A paper contained in the symposium "Research Work on the Strength of Steel", edited by I. V. Kudryatseva, Moscow, 1951.

ZAVARTSEVA, V.M., kand.tekhn.nauk

Using the photoelastic method in studying stresses in the
contact area of a bent beam and cover plates. [Trudy]
TSNIITMASH 91:23-38 '59. (MIRA 12:8)
(Photoelasticity) (Girders)

ZAVARTSEVA, V.M., kand.tekhn.nauk

Photoelastic determination of stresses in a disk with a key
groove subjected to internal pressure. [Trudy] TSNIITMASH
91:39-55 '59. (MIRA 12:8)
(Photoelasticity) (Disks, Rotating)

SOV/124-57-4-4750

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 126 (USSR)

AUTHOR: Zavartseva, V. M.

TITLE: The Employment of an Optical Polarized-light Method in the Investigation of Contact Stresses Arising During Upsetting Operations Performed on Specimens Which Are Not Allowed to Expand Laterally
(Primeneniye polarizatsionno-opticheskogo metoda k issledovaniyu kontaktnykh napryazheniy pri osadke bez ushireniya)

PERIODICAL: V kn.: Konstruktsionnaya prochnost' staley. Moscow, Mashgiz, 1954, book 63, pp 130-188

ABSTRACT: The experiment was conducted in the following manner: The elastic bottom plate of a press, on which the upsetting of lead specimens was performed, was made of the photoelastic material IM-44; by determining the stresses in the bottom plate throughout the plane of contact with the specimen being deformed, the author seeks to evaluate the contact stresses arising in the specimen. The investigation of contact stresses was performed with dry as well as lubricated contact between the surfaces of the lead specimen and the bakelite plate. The results of the investigation were employed in plotting

Card 1/2

SOV/124-57-4-4750

The Employment of an Optical Polarized-light Method (cont.)

diagrams of the distribution of the tangential and normal stresses in the plane of contact for four specimens with different dimensional relationships and various degrees of upsetting. The experimental data are compared with theoretical solutions. Regrettably, the author fails to indicate what criteria he employed in dealing with the fringe effects so characteristic of the IM-44 material.

S. P. Shikhobalov

Card 2/2

SOV/124-58-8-9154

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 8, p 120 (USSR)

AUTHORS: Unksov, Ye. P., Zayartseva, V. M.

TITLE: Using Photoelasticity to Study the Stresses That Arise During Plastic Forging Deformation (Primeneniye polarizatsionno-opticheskogo metoda dlya izucheniya napryazheniy pri plasticheskoy osadke)

PERIODICAL: V sb.: Vopr. konstrukts. prochnosti stali. Moscow, Mashgiz, 1957, pp 228-254

ABSTRACT: To study the elastic stresses in forgings at a stress level just below that at which plastic deformation begins, the authors employ photoelastic models of forgings. The assumption is made that the start of the plastic-deformation process and the incipient compressive reduction with only a small degree of plastic deformation are characterized by the continuance of the stress distribution attained at the elastic limit. An investigation is made of the stress distribution during forging of circular shafts on flat forging dies and on shaped dies, and during forging of rectangular billets on flat dies.

V. P. Netrebko

Card 1/1

137-58-1-669

ZAVARTSEVA, V. M.

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 103 (USSR)

AUTHORS: Unksov, Ye. P., Zavartseva, V. M.

TITLE: Use of Polaroid Optics to Study Stresses During Plastic Upsetting (Primeneniye polarizatsionno-opticheskogo metoda dlya izucheniya napryazheniy pri plasticheskoy osadke)

PERIODICAL: V sb.: Vopr. konstruks. prochnosti. Moscow, Mashgiz, 1957, pp 228-254

ABSTRACT: An investigation has been performed with the aid of the optically active material IM-44 relative to the forging of shafts and upsetting. Diagrams of the principal stresses (S) occurring during plastic deformation (D) have been obtained. The existence of tensile S during the forging of shafts is demonstrated, and the effect of the degree of D and tool shapes upon the nature of the S is established. Practical recommendations are offered: round shafts should be forged in accordance with "square-rectangle-square" system, while when the "circle-circle" system is employed in the case of flat strikers, it is necessary that the D per individual reduction be ≥ 7.5 percent, while in the first forging of shaped strikers the limiting

Card 1/2

137-58-1-669

Use of Polaroid Optics to Study Stresses (cont.)

angle of seizure must be $\geq 90^\circ$, etc.

Ya.O.

1. Stress analysis—USSR 2. Polaroid optics—Applications

Card 2/2

ZAVARITSKIY, V.A.

Metasomatic alteration of rocks enclosing the Kachar iron
deposit. Zap. Vses. min. ob-va 92 no.5:525-534, '63.
(MIRA 17:1)

DOKUCHAYEV, Vasil'iy Vasil'yevich [deceased]; ZAVARITSKIY, V.N.; TYURIN, I.V., aka-
demik, otv.red.; SPRIGINA, L.I., red.izd-va; NOVICHKOVA, N.D., tekhn.red.

[Works] Sochineniia. Moskva, Izd-vo Akad. nauk SSSR. Vol.8. [Papers
and addresses. Correspondence] Raboty i vystupleniia. Perepiska,
1961. 556 p. (MIRA 14:6)

(Soils)

(Agriculture)

2 ZAVARTSEV, A.M.

KOGAN-VOL'MAN, Georgiy Izrailevich, kand.tekhn.nauk; CHERNYSHEV, N.A.,
kand.tekhn.nauk, retsenzent; ZAVARTSEV, A.M., inzh., retsenzent;
SAPOZHKOVA, N.M., inzh., red.; STUPIN, A.K., red.izdatel'stva;
MODEL', B.I., tekhn.red.

[Flexible wire shafts] Gибкие provolochnye valy. Moskva, Gos.
nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 246 p. (MIRA 11:1)
(Shafts and shafting)

ZAVARTSEVA, V.M.

UNKSOV, Ye.P., doktor tekhnicheskikh nauk, professor; ZAVARTSEVA, V.M.,
kandidat tekhnicheskikh nauk.

Using the polarized light method to study stresses in plastic
swaging. [Trudy] TSNIITMASH no.85:228-254 '57. (MIRA 10:9)
(Deformations (Mechanics)) (Photoelasticity)

ZAVARUKHIN, G.V.

Chemical industry and science in the 6th five-year plan. Zhur.
ob.khim. 26 no.3:I-IV Mr '56. (MLA 9:8)
(Chemistry)

ZAVARUKHIN, S.

ZAVARUKHIN, S. (Chelyabinskaya oblast')

Not a single fire. Pozh.delo 3 no.10:3 0 '57.

(MIRA 10:11)

(Chelyabinsk--Fire prevention)

ZAVARUKHINA, T.

Let's give methodological help to factories. Prof.-tekh.
obr. 18 no.4:29 Ap '61. (MIRA 14:4)

1. Zamestitel' predsedatelya uchebno-metodicheskogo soveta
Sverdlovskogo sovmarkhoza.
(Sverdlovsk Province--Vocational education)
(Teaching)

TETERYATNIKOV, Mikhail Stepanovich; BAYKOVA, K.G., inzh., retsenzent;
BELOGLAZOV, V.I., kapitan, retsenzent; ZAVARUYEV, V.V., inzh.,
red.; LOBANOV, Ye.M., red. izd-va; YERMAKOVA, T.T., tekhn. red.

[Ship accounting] Sudovaya otchetnost'. Moskva, Izd-vo "Rechnoy
transport," 1961. 131 p. (MIRA 14:7)
(Inland water transportation--Accounting)

ZAVARYKIN, F.I.

[Railroad workers of the Ashkhabad main line during the
Great Patriotic War, 1941-1945] Zheleznodorozhnik Ashkha-
badskoi magistrali v gody Velikoi Otechestvennoi voiny,
1941-1945 gg. Chardahou, Turkmeniskii gos. pedagog. in-t
im. V.I. Lenina, 1961, 172 p. (MIRA 16:4)
(Ashkhabad--World War, 1939-1945--Transportation)
(Ashkhabad--Railroads--Employees)

ZAVARZA, N. M. redaktor; KHRONCHENKO, F. I., redaktor; KUZ'MIN, G. M.,
tekhnicheskii redaktor

[Generalizing the experience of leading workers in photogrammetry;
collection of articles] Obobshchenie opyta peredovikov kameral'nogo
proizvodstva; sbornik statei. Moskva, Izd-vo geodesicheskoi lit-ry,
1954. 77 p. [Microfilm] (MLRA 8:2)
(Photographic surveying)

ZAVARZA, N.T.

3(4)
AUTHOR:

None Given.

SOV/6-58-10-17/17

TITLE:

Chronicle (Khronika)

PERIODICAL:

Geodeziya i kartografiya, 1958, Nr 10, pp 79 - 80 (USSR)

ABSTRACT:

A conference of the heads of aerial surveying authorities was held in Moscow at the Glavnoye upravleniye geodezii i kartografii MVD SSSR (Central Bureau of Surveying and Cartography at the Ministry of the Interior USSR) on September 10 - 12, 1958, under participation of the collaborators of the administration of the GUCK and the TsNIIGAIK. Two lectures were delivered: N.T. Zavarza, Departmental Head at the GUCK spoke about "Results in the Execution of the State Plan for Topographical-Surveying Work During the Eight Months and the Measures taken for Meeting the Target for 1958". P.I. Povalyayev, Departmental Head at the GUCK spoke about "Plans for Topographical-Surveying Work for 1959". The volume of work done has been increased by 8,9 % as compared to the same period in 1957. It was stated that reorganization has not yet been everywhere completed. The necessity of increasing the quality of work was emphasized. Measures were decided upon for the improvement of control and the auditing of

Card 1/2

Chronicle

SOV/6-58-10-17/17

work. It was stated that the chief engineers of several AGP (Zabaykal'skoye AGP - N.A. Koreshkov, Sredneaziatskoye AGP - V.A. Kolibayev, Kazakhskoye AGP - K.A. Zaytsevskiy) do not endeavour to ensure compliance with the order established for the development and the auditing of field projects. For this reason it was decided to set a deadline for elaborating and auditing field projects for 1959, not later than March 1 - 15.

Card 2/2

USCOMM-DG-60,861

IVANOV, Vitaliy Fodorovich; ZAYARZA, N.T., red.; SHAMAROVA, T.A., red.isd-va;
ROMANOVA, V.V., tekhn.red.

[Drawing up technical plans and estimates for topographical and
geodetic surveying] Sostavlenie tekhnicheskikh proektov i smet
na topografo-geodezicheskie raboty. Moskva, Isd-vo geodes.lit-ry,
1959. 230 p. (MIRA 12:3)

(Surveying)

ZAVARZA, N.T.

Let us greet the 22d Congress of the CPSU in a worthy manner.
Geod.1 kart. no.8:9-14 Ag '61. (MIRA 14:10)
(Surveying) (Cartography)

TRENIN, Boris Konstantinovich; ZAVARZA, N.T., red.; KOMAR'KOVA, L.M.,
red. izd-va; SUNGUROV, V.S., tekhn.red.

[Standard forms of field books and instrument records used in
topographic and geodetic works] Tipovye formy polevykh zhurnalov,
pasportov, instrumentov, ispol'zuemye na topografo-geodezicheskikh
rabotakh. Moskva, Geodezizdat, 1962. 351 p. (MIRA 15:7)
(Topographical surveying)

ZAVARZA, P., geroy Sotsialisticheskogo Truda.

Strength of friendship. Mast.ugl. 3 no.2:28-29 P '54. (MIRA 7:3)

1. Mashinist kombayna shakhty No.1 "TSentral'naya" kombinata
Stalinugol'. (Coal miners) (Czechoslovakia--Relations (General)
with Russia) (Russia--Relations (General) with Czechoslovakia)

SVET, D.Ya.; ZAVARZA, T.N.

Selection and efficient use of spectral sensitivity of photocells
in bichromatic pyrometry. Izv.tskh. no.2:8-10 F '64.

(MIRA 17:4)

ACCESSION NR: AP4016584

S/0115/64/000/002/0008/0010

AUTHOR: Svet, D. Ya.; Zavarza, T. N.

TITLE: Selection and reasonable use of spectral sensitivity of phototubes in bichromatic pyrometry

SOURCE: Izmeritel'naya tekhnika, no. 2, 1964, 8-10

TOPIC TAGS: pyrometry, bichromatic pyrometry, phototube, phototube spectral sensitivity, blue/red ratio, antimonycesium phototube, TsEP-3 pyrometer

ABSTRACT: The characteristics of new "multi-alkaline" (Sb-K-Na-Cs) phototubes developed by T. N. Rabotnova, L. V. Kononchuk, and L. A. Shchekina for use in bichromatic pyrometry are reported. Manufactured in both semitransparent and mass variants, these phototubes have a higher red-wave sensitivity, a higher temperature stability (within $+20+50^{\circ}\text{C}$), and a wider spectral-sensitivity range (up to 900 mmicrons) than the conventional Sb-Cs tubes. The

Card 1/2

ACCESSION NR: AP4016584

latter characteristic permits obtaining a sufficient blue-red ratio without approaching the unstable range near the "red border." A pyrometer calibrating curve exhibited high stability over a test period of about 80 days in measuring a color temperature of 1,600C in the case where the long-wave range was excluded. The blue-red ratio varied by 1-2% in the +20+50C range. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 12Mar64

ENCL: 00

SUB CODE: IE, GE

NO REF SOV: 009

OTHER: 001

Card 2/2

ZAVARZHIN, M. K.

Yeletskiy, Ye. S. and Zavarzhin, M. K. "On the problem of ephemeral total poliomyelitis of adults," Trudy (Sarat. gos. med. in-t), 1948, Vol. VII, p. 199-208

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'n'kh Statey, No. 3, 1949)

ZAVARZIN, A., kand. arkhitektury.

Now standard for natural building stones. Stroi. mat. 4 no.3:26-28
Mr '58. (MIRA 11:3)

(Building stones--Standards)